Nutrition News

PUBLISHED BY NATIONAL DAIRY COUNCIL - CHICAGO

TRENDS IN FAMILY DIETS

FAITH CLARK, Ph. D.
Institute of Home Economics
United States Department of Agriculture

Considerable improvement in family diets has taken place in this country in the past several decades. In the 1930's when a large-scale dietary survey was made, a third of the diets was classed as "poor." Today in probably as few as 10 percent of the households can diets be called "poor" by the standards used in the earlier period.

Improved Diets

Diets have improved since the 1930's because people are drinking more milk now and using more of the other dairy products that contain nonfat solids. They also use more meat, poultry and fish, and more of some vegetables and fruits. The enrichment of bread and other grain products, new developments in the marketing of foods, and nutrition education, as well as better economic conditions, have all had a part in the betterment of diets.

Most all of the improvement, however, took place between the mid-thirties and the early postwar period. Relatively little improvement in the diets of city families appears to have taken place between 1948 and 1955 when large-scale surveys were made. In 1955 approximately the same proportion of urban households as in 1948 had diets furnishing recommended amounts of calcium, vitamin A, thiamine, and riboflavin—nutrients often in shorter than desirable supply (see chart). To be sure, there was some increase in the percentage of households meeting the recommended levels for protein, iron, and niacin, but the percentage meeting the allowance for ascorbic acid was lower.

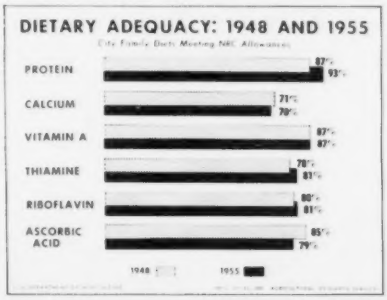
The improvement in protein, iron, and niacin levels has occurred chiefly because of the greater consumption of meat, poultry, and fish. The lowering of ascorbic acid levels resulted chiefly from a shift in the pattern of household consumption of fruits and vegetables. Quantities of milk, fats, and oils were about the same in the two periods while grain products continued their downward trend.

Families Eat Out

Food expenditures of city families during this period increased about one-fourth. City families in 1948 were spending about $25.50 a week for food (for use at home and meals and snacks eaten away from home). In 1955, the corresponding average was $32—or $6.50 more a week for food than in 1948. Part of the increased expenditures may be attributed to larger average family size, part to higher food prices, but much of it is simply a shift toward more expensive types of foods including the services that go with meals eaten away from home.

Convenience Foods

Higher incomes have made it possible for consumers to spend more for food away from home as well as for built-in services in foods eaten in the home. In 1948, 16 percent of the total food expenditures of city families went for meals and snacks away from home; in 1955, the figure was up to 19 percent. In 1948, about 26 percent of the expenditures for food at home went for certain prepared and partially prepared foods; in 1955, about 28 percent for this same list. An example of the use of more expensive types of foods at home is the purchase of steak (other than round) at least once a week by only 1 out of 4 urban families in 1948 compared with 1 out of 3 in 1955. These are but a few examples of the shifts in family food practices that have taken place since World War II.



Important for nutrition education is the fact that, in spite of increased spending by families for food in recent years, relatively little improvement in the nutritive content of their diets has occurred. The need for improved diets is shown by the chart. Only 70 percent of city households in 1955 had food supplies that furnished the Recommended Dietary Allowances of the National Research Council for calcium. Thus, 3 out of 10 families might well improve their diets in calcium, of which milk is the principal source.

Farm and City Food Habits

Only about 80 percent of the city families had food supplies that furnished the recommended amounts of ascorbic acid, thiamine, and riboflavin. Farm diets tended to be better than city diets in all nutrients except vitamin A and ascorbic acid, yet 24 percent of the farm families included in the 1955 survey had food supplies not meeting the National Research Council's calcium recommendation.

Thus large proportions of the population—though not suffering from malnutrition—choose foods that furnish less than recommended amounts of several nutrients. Relatively favorable economic conditions have not meant nutritionally adequate diets for all. If people are to have the kinds of diets that nutritionists now recommend, vigorous educational programs will continue to be needed.

OCTOBER, 1957 • • VOLUME 20 • • NUMBER 5

Volume 20, will be issued February • April — October — December 1958.
COPYRIGHT 1957, NATIONAL DAIRY COUNCIL, CHICAGO 6

Glances AT NUTRITION RESEARCH

Surveys of food intakes and health status of people in the United States continue to reveal poor intakes of milk, citrus and green leafy and yellow fruits and vegetables associated with low intakes of calcium and vitamins A and C; and high incidence of overweight and dental defects.

Consumption of milk as a beverage—Daily milk consumption of 5560 school children in Alabama averaged 3.2 glasses for boys and 2.5 glasses for girls. Of 3948 adults, the men reported drinking 3.4 glasses of milk daily while the women consumed 2 glasses. Twice as many girls and women reported drinking no milk than did their counterpart of boys and men. With advancing grade, more children preferred plain whole milk to flavored milk. With advancing age, more adults preferred buttermilk.

—J. Am. Diet. Assn. 33:485 (May) 1957.

Mother's nutrition poorest—Of all members of 46 families, the mothers were found to have poorest nutrient intake; lowest milk consumption, most excess weight, and greatest number of complaints and physical abnormalities possibly related to poor nutrition. Teenage girls were close seconds to their mothers in poor eating habits. Low intakes of milk and vitamin C-rich fruits were the most common dietary faults of these families. Filled, missing, and malocclued teeth were the most common physical defect.

—Misc. Pub. No. 5 Nebraska Agric. Exp. Sta. (April) 1957.

Nutrient intake of college men—Of the calories consumed by 290 well fed young men, about 15% came from protein, 40% from fat, and 45% from carbohydrate. Calories and thiamine were the nutrients in least adequate supply among the greatest number of these young men.

—J. Am. Diet. Assn. 33:374 (April) 1957.

Effect of food preferences—Food preferences seemed to have little influence on the adequacy of nutrient intakes of 81 young women. Failure to eat enough milk, bread, cereals and eggs was the dietary fault responsible for inadequate intakes of calcium, iron, thiamine and other nutrients. These foods were rarely listed as being disliked.

—J. Am. Diet. Assn. 33:98 (Feb.) 1957.

Nutrition and health related—Among 54 white and 63 Negro women 40 to 90 years of age, less than 5% reported food intakes that provided 80 percent of the recommended allowances for calories and 7 nutrients. Intakes of calcium, vitamin A and vitamin C frequently were less than 40% of recommended amounts. Women with poorest nutrient intakes complained most of tiredness, pain in joints, shortness of breath, constipation, loss of appetite and swelling ankles; were most often overweight; and showed higher mortality rate over a seven year period.

—J. Am. Diet. Assn. 33:466 (May) 1957.

Dr. Faith Clark

Faith Clark has been active in the field of home economics research for twenty years. She has participated in and authored reports on many of the food consumption surveys. Dr. Clark is presently serving as Acting Director of the Household Economics Research Division, Institute of Home Economics in the U.S. Department of Agriculture. Miss Clark received her A.B. from Wooster College and her doctorate from the University of Chicago.

Fat In The Diet

The Council on Foods and Nutrition of the American Medical Association recently published a condensation of a report of the nutrition committee of the American Heart Association. This report states that numerous factors besides diet are involved in the development of atherosclerosis and myocardial infarction. Excessive intake of calories, including fat calories, and lack of exercise leading to weight gain may be a factor.

A common sense approach to eating for general good health is to select a balanced, varied diet with only enough calories to maintain a desirable body weight, avoiding excessive fat intake and consuming plenty of good quality protein.

Continued investigations in diet therapy and basic research may in the future unravel the inter-relationships of diet and the other factors involved in this disease so that we may lessen the prevalance of coronary thrombosis.

THE COMMUNITY NUTRITION INSTITUTE

By Anne Bourquin, Ph.D., Chairman, Foods and Nutrition
College of Home Economics, Syracuse University

The Community Nutrition Institute at Syracuse University, established in 1947, provides a framework in which groups of specialists come together to discuss their common problems and to familiarize themselves with advances in related fields. The founders of the Institute saw a need for community cooperation and teamwork.

We bring to the Institute the men and women who are actually pushing back the boundaries of ignorance. They sit down with us to talk about their work, to give us a glimpse into their world of research. They help us see new and better ways to serve mankind in our own field.

We keep the group heterogeneous in character. The nutritionist, scientist, public health officer, health educator, nurse, teacher and housewife are all a part of the community. All are involved in nutrition either directly or indirectly. All have something to contribute and to learn.

We could never serve our purpose as effectively if the Bureau of Nutrition of the New York State Department of Health under the direction of Dr. J. H. Browe and his associate, Marguerite Queneau, and their able staff did not cooperate and co-direct the Institute with us.

Working together has its own techniques. Seminars and symposiums help to develop these techniques. In this manner the Community Nutrition Institute is intended to operate.

The earlier focus of interest was on the nutritive composition of food and upon the effect of nutritional deficiencies in animals. This approach preceded the application of these studies to man. Now the needs of the human body must be determined. We must ask ourselves—whose body and under what conditions shall we study these needs? What is the effect of environment, stress and disease upon these needs? What are the different needs at different ages and for different sexes and even different races?

Nutrition starts with the exciting detection of what is happening in the cell of the living organism. It extends to the heart-breaking task of supplying the peoples of the world with food to keep those cells alive and healthy.

To supply the living cell with its needs to carry out a specific function in the body may be the scientific reason for stressing an adequate diet or suggesting the consumption of one food rather than that of another. The nutritionist however is called upon to decide how to best help an individual.

In dealing with people we must understand that nutrition is effected by emotions quite as profoundly as is social behavior. Food has a meaning for one person quite different from its meaning for another. A piece of cake may be 250 calories to the nutritionist but to Mary, whose weight is getting out of hand, it may be the visible sign of society's acceptance of her.

Modern insight into the psychology of man leads us to believe that perhaps, except in catastrophes such as world wars, the acceptance of food patterns as we find them is more productive of the desired results. For the nutritionist this means evaluating the diet in terms of nutrients—not by foods. Having done this the foods acceptable to the individual and supplying the needed nutrients may be found.

Much time is spent in trying to change well fixed food patterns. Perhaps we need to look at ourselves and change our own techniques. By working for improvement—not change of eating habits—we might avoid the confusion, resistance and resentment which some of our teaching and counseling often evokes.

The Community Nutrition Institute at Syracuse University believes that it is helping the nutritionist and specialist in related fields to understand each other's aims and skills. We hope to show that if this interplay of knowledge leads to complexity it also leads to stimulating mutual interests. The study and practice of nutrition is as intriguing in all its ramifications as is life itself.

A CITY BREAKFAST CAMPAIGN— AN EXPERIMENT IN MASS MEDIA

By Anel Beliz, Director of Information
International Cooperation Administration, Panama

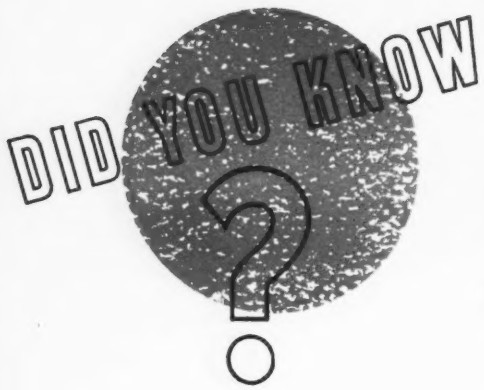
Seven foreign students representing Panama, Brazil, Libya, Indonesia, Ethiopia and Egypt were spending a year of study in the United States to learn new skills and techniques in the production and use of audio-visual materials. In the Audio-Visual Center of Indiana University under the International Cooperation Administration's Leadership Training Program, they carried out a five-month campaign to improve the breakfast habits of Indianapolis school children through the use of audio-visual aids.

The "Better Breakfast Campaign" was organized by the Board for Fundamental Education of Indianapolis and the Audio-Visual Center of Indiana University. The Board of Public Health, Board of Education, Dairy Council of Indianapolis and others cooperated. Fourth, fifth and sixth grade children from eight Indianapolis schools participated. Four schools served as experimental and four as control groups.

The students conducted surveys in the eight schools to determine the breakfast habits of children. The surveys disclosed that nearly 15 percent attended school without eating any breakfast and that 32 percent of the pupils did not have a satisfactory breakfast. Citrus fruits were reported as eaten by only 14 percent of the boys and girls. Better than half of the pupils did drink milk and 80 percent reported eating either cereal, egg or meat. The survey showed that, in general, more girls than boys neglected the morning meal. Of those having breakfast, boys ate more satisfactorily than girls.

The foreign students helped develop special programs in the classroom to stimulate the children's interest in improving breakfast habits. These activities included learning about breakfast habits of children in other countries, making drawings and posters about "good" breakfasts, composing

(Continued on Page Twenty)



—that cows may soon be getting back some of the milk they give since a feed supplement derived from whey, an end product in cheese-making, now being tested indicates this product aids growth and milk production?

—that the Romans munched on chicory, endive or celery to excite their hunger before attending large banquets?

—that vegetable fats cannot be assumed to be a satisfactory replacement of butterfat in the diets of infants and young children?

—that the population of 24,000 in Green County, Wisconsin is less than one-third the number of cows on its farms and it produces nearly one-fourth of all the Swiss cheese in America?

—that it is possible to obtain a nutritionally adequate diet on less money than the average family spends for food?

—that ice cream was once placed between fine sheets of gold leaf before it was served to Indian Rajahs?

—that using cow bone for repairing defects in human jaw is now being studied at the Naval Research Institute in Washington, D.C.?

—that the American Spice Trade Association declares we eat nearly ten million pounds of cinnamon a year to put it far ahead in popularity over the six commonly used baking spices—nutmeg, ginger, cloves, allspice, poppy and caraway seeds?

THINGS YOU'LL LIKE TO READ

Teaching Nutrition—M. Pattison, H. Barbour and E. Eppright. Iowa State College Press. Ames. 1957. $3.95.

This book presents an approach to teaching nutrition which takes into account the need for simplified technical material and for motivation of the student to consider his food habits and to want to change them when needed. Covers problems in nutrition education, attitudes toward foods, and evaluation. The authors have assembled many practical ideas for classroom work, using the most modern teaching aids available.

Essentials of Nutrition—Henry C. Sherman and Caroline S. Lanford. 4th Ed. Macmillan Co. New York. 1957. $4.90.

The authors in this edition give the reader the latest view of essentials of nutrition and the developments in teaching the subject. Their approach to the principles of nutrition is through the relation of food to health and efficiency of the normal young person. Subject matter is presented in a useful order: energy relationships, proteins and amino acids, minerals and vitamins. The book includes newest research findings.

A CITY BREAKFAST CAMPAIGN —AN EXPERIMENT IN MASS MEDIA

(Continued from Page Nineteen)

songs, writing plays and using a portable cooking cart to prepare a breakfast in the classroom. The pupils practiced table manners, table setting and serving, and sanitary procedures. They learned to work with others in the preparation of a fruit, hot cereal, milk and buttered toast.

Another stimulating activity was an animal feeding demonstration carried out in the classroom. Through the cooperation of the Dairy Council of Indianapolis, each school in the experimental group conducted a six-week demonstration. The children fed one white rat fruit, cereal and milk—representing a good breakfast; another rat was fed foods representing a poor selection for breakfast. The children chose a sweet roll and a beverage other than milk for his diet. They saw the effects of food on the growth and well-being of the animals. These effects were related to the children's ways of eating and the importance of breakfast in the day's food supply.

Posters were created to visualize for parents and pupils ideas such as "Be a Star with a Better Breakfast" and "What to Buy for a Good Breakfast." Filmstrips, pamphlets and banners were designed and produced. Newspaper releases were written and exhibits prepared. A filmed television program featured the mayor of Indianapolis as he proclaimed the Better Breakfast Week.

Following this dramatic climax to a five-month school project, another survey was made to determine the effectiveness of this approach to a breakfast problem. The data disclosed that the community approach is **motivationally sound** when accompanied by specific teaching. In the experimental schools citrus fruits and juices were now eaten by over 40 percent of the children while 60 percent of the boys and girls were eating satisfactory breakfasts. There was a 6 percent increase in the use of milk as a beverage and a 2 percent increase in the use of cereal, eggs or meat as breakfast foods.

The foreign students saw results from group action and ways to use this method in attacking problems in their own countries.